

Table A-21. **Total (Federal plus company and other) funds for industrial R&D performance in the U.S. as a percent of net sales of companies that performed industrial R&D in the U.S., by industry and size of company, ranked by size of R&D program: 2000**

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Industry and size of company	NAICS codes	Total (Federal plus company and other) R&D funds			Total (Federal plus company and other) R&D funds as a percent of net sales		
		First 4 companies	Next 4 companies	Next 12 companies	First 4 companies	Next 4 companies	Next 12 companies
		[In millions of dollars]			[Percent]		
Distribution by industry:							
All industries.....	21–23, 31–33, 42, 44–81	19,061	14,461	26,244	11.1	7.6	6.1
Manufacturing.....	31–33	19,061	12,397	22,108	11.1	5.5	5.5
Food.....	311	345	177	251	0.9	0.4	0.3
Beverage and tobacco products.....	312	408	6	0	0.8	0.3	0.0
Textiles, apparel, and leather.....	313–16	71	48	59	0.9	0.8	1.1
Wood products.....	321	89	6	4	1.1	0.2	0.3
Paper, printing and support activities.....	322, 323	2,251	208	181	3.7	0.9	0.4
Petroleum and coal products.....	324	1,018	99	9	0.5	0.1	0.1
Chemicals.....	325	6,213	4,282	5,208	10.8	11.7	6.4
Basic chemicals.....	3251	504	270	502	3.0	4.6	2.3
Resin, synthetic rubber, fibers, and filament.....	3252	2,462	277	108	6.7	4.0	1.9
Pharmaceuticals and medicines.....	3254	5,866	3,809	2,456	11.6	9.2	8.8
Other chemicals.....	325 (minus 3251–52, 3254)	2,052	322	355	6.6	2.4	3.0
Plastics and rubber products.....	326	609	210	260	3.5	1.7	2.2
Nonmetallic mineral products.....	327	512	96	108	3.4	1.4	1.3
Primary metals.....	331	298	82	103	0.5	0.7	0.5
Fabricated metal products.....	332	723	181	233	3.3	2.4	1.0
Machinery.....	333	1,995	741	1,183	6.6	4.9	4.7
Computer and electronic products.....	334	16,124	7,039	6,708	15.1	10.7	6.9
Computers and peripheral equipment.....	3341	3,143	945	508	9.1	15.7	3.6
Communications equipment.....	3342	8,614	873	848	12.0	8.5	7.0
Semiconductor and other electronic components.....	3344 (S)	7,151	1,487	2,069	11.1	4.7	11.5
Navigational, measuring, electromedical, and control instruments.....	3345	9,134	1,731	1,881	13.5	15.3	12.0
Other computer and electronic products.....	334 (minus 3341–42, 3344–45)	210	41	45	7.9	6.2	1.9

See explanatory information and SOURCE at end of table.

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Industry and size of company	NAICS codes	Total (Federal plus company and other) R&D funds			Total (Federal plus company and other) R&D funds as a percent of net sales		
		First 4 companies	Next 4 companies	Next 12 companies	First 4 companies	Next 4 companies	Next 12 companies
		[In millions of dollars]			[Percent]		
Distribution by industry:							
Electrical equipment, appliances, and components.....	335	2,281	237	399	2.1	2.9	2.4
Transportation equipment.....	336	15,110	7,604	5,031	4.7	4.1	6.2
Motor vehicles, trailers, and parts.....	3361–63	14,517	2,439	760	3.8	5.0	2.0
Aerospace products and parts.....	3364	7,677	2,189	431	7.6	6.8	5.6
Other transportation equipment.....	336 (minus 3361–64)	868	234	98	4.5	2.7	1.2
Furniture and related products.....	337 (S)	138	56	45	1.1	0.9	0.6
Miscellaneous manufacturing.....	339	2,600	358	370	37.3	10.1	4.8
Medical equipment and supplies.....	3391	2,578	290	306	46.4	6.4	5.3
Other miscellaneous manufacturing.....	339 (minus 3391)	216	42	70	5.2	2.0	3.0
Other manufacturing .....	31–33 (minus 311–16, 321–27, 331–37, 339)	--	--	--	--	--	--
Small manufacturing companies <sup>1</sup> .....	Fewer than 50 employees	12	5	5	39.0	19.1	6.5
Nonmanufacturing.....	21–23, 42, 44–81	11,758	3,967	6,659	19.4	14.1	5.0
Mining, extraction, and support activities.....	21	635	112	60	1.9	0.4	0.8
Utilities.....	22	59	27	30	0.2	0.1	0.1
Construction.....	23	89	26	5	2.4	2.0	0.1
Trade.....	42, 44, 45	9,004	2,400	3,278	15.5	12.9	10.5
Transportation and warehousing.....	48, 49	184	17	10	0.4	0.1	0.1
Information.....	51	5,975	1,431	2,465	17.4	1.6	3.0
Publishing.....	511	5,316	1,107	1,869	22.2	23.9	15.7
Newspaper, periodical, book, and database.....	5111	241	20	6	2.7	0.3	0.6
Software.....	5112	5,316	1,107	1,860	22.2	23.9	25.9

See explanatory information and SOURCE at end of table.

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		First 4 companies	Next 4 companies	Next 12 companies	First 4 companies	Next 4 companies	Next 12 companies
		[In millions of dollars]			[Percent]		
Distribution by industry:							
Broadcasting and telecommunications.....	513 (S)	1,083	187	101	0.6	0.2	10.2
Radio and television broadcasting.....	5131 (D)		0	0	3.3	0.0	0.0
Telecommunications.....	5133 (S)	909	137	45	0.4	0.3	4.9
Other broadcasting and telecommunications.....	513 (minus 5131, 5133)	31	0	0	100.0	0.0	0.0
Other information.....	51 (minus 511, 513)	1,364	228	219	3.9	8.1	4.7
Finance, insurance, and real estate.....	52, 53	975	447	329	1.1	1.7	0.7
Professional, scientific, and technical services.....	54 (S)	3,175	983	1,637	27.4	47.4	17.2
Architectural, engineering, and related services.....	5413	994	424	407	18.1	29.2	9.8
Computer systems design and related services.....	5415	395	288	525	13.3	27.5	5.7
Scientific R&D services.....	5417	2,961	859	1,171	26.2	36.3	57.8
Other professional, scientific, and technical services....	54 (minus 5413, 5415, 5417) (S)	210	57	45	14.9	0.8	1.3
Management of companies and enterprises.....	55	37	2	0	28.3	0.4	0.4
Health care services.....	621-23	46	22	22	0.9	1.3	0.7
Other nonmanufacturing .....	56, 61, 624, 71, 72, 81	272	106	120	2.2	3.9	0.4
Small nonmanufacturing companies <sup>1</sup> .....	Fewer than 15 employees	67	12	7	16.3	489.6	42.0

See explanatory information and SOURCE at end of table.

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		First 4 companies	Next 4 companies	Next 12 companies	First 4 companies	Next 4 companies	Next 12 companies
		[In millions of dollars]			[Percent]		
Distribution by size of company: [Number of employees]							
Total.....	(na)	19,061	14,461	26,244	11.1	7.6	6.1
5 to 24.....	(na) (S)	61	31	57	41.3	160.6	142.9
25 to 49.....	(na)	118	60	123	74.4	161.4	128.2
50 to 99.....	(na)	174	120	236	85.7	143.1	159.6
100 to 249.....	(na)	282	200	458	15.2	39.4	91.2
250 to 499.....	(na)	491	346	793	133.7	32.3	35.5
500 to 999.....	(na)	781	384	895	48.6	23.1	19.2
1,000 to 4,999.....	(na)	1,896	1,379	3,252	32.2	13.2	24.7
5,000 to 9,999.....	(na)	3,276	2,077	3,834	16.9	19.1	7.8
10,000 to 24,999.....	(na)	8,500	4,301	7,236	25.7	16.9	6.9
25,000 or more.....	(na)	19,061	13,983	23,754	11.1	6.8	5.2

<sup>1</sup> The frame from which the statistical sample was selected was divided into two partitions based on total company employment. In the manufacturing sector, companies with employment of 50 or more were included in the large company partition. In the nonmanufacturing sector, companies with employment of 15 or more were included in the large company partition. Companies in the respective sectors with employment below these values, but with at least 5 employees, were included in the small company partition. The purpose of partitioning the sample this way was to reduce the variability in industry estimates largely attributed to the random year-to-year selection of small companies by industry and the high sampling weights that sometimes were assigned to them. Because of this, detailed industry statistics were possible only from the large company partition; detailed industry statistics from the small company partition were not possible. Statistics from the small company partition are shown separately and are included in manufacturing, nonmanufacturing, and all industries totals. For more information, see "frame creation" and "sample selection" in the technical notes in Section B.

**KEY:** (S) = Indicates imputation of more than 50 percent.  
 (--) = Indicates data not collected.  
 (na) = Not applicable.

**NOTE:** Rankings were based on total (company, Federal, and other) R&D funds.

**SOURCE:** National Science Foundation/Division of Science Resources Statistics, Survey of Industrial Research and Development: 2000